NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE GENERAL SPECIFICATION

FIREBREAK
(Ft.)
CODE 394

GENERAL SPECIFICATIONS

Procedures, technical details, and other information listed below provide additional guidance for carrying out selected components of the named practice. This material is referenced from the conservation practice standard for the named practice and supplements the requirements and considerations listed therein.

This practice may adversely affect significant cultural resources and should be submitted to a cultural resource specialist for a determination of impacts before the practice commences.

LOCATION OF FIREBREAKS

Firebreaks will be located parallel to public roads and railroads that are adjacent to forest boundaries.

Firebreaks will also be located within forest boundaries where necessary for forest management activities.

Firebreaks may follow property boundaries. Adequate distance must be left between the firebreak and property boundary to allow the proper construction of erosion control measures (wing ditches & water bars).

Locate firebreaks on the contour where possible to minimize risk of soil erosion. When firebreaks cannot be installed on the contour, use a gradual grade. The firebreaks should be located near ridge crests and valley bottoms.

If winds are predictable, firebreaks will be located perpendicular to the wind and on the windward side of the area to be protected.

Debris created from the construction of the firebreak can create a fuel load hazard if left in a pile or row adjacent to the firebreak. ALL debris MUST be scattered throughout the area inside the firebreak in such a manner to not create a fire hazard.

Firebreaks do not have to be straight. Sharp curves should be avoided. Gentle bends are preferred. It is preferred to detour around obstacles or any area where the construction of the firebreak will be difficult. It is acceptable to leave a large tree within a clean tilled firebreak. There should be no trees left within a vegetated firebreak.

EROSION CONTROL MEASURES

Back blade firebreaks away from the edge of streams, roads, or gullies.

Install water bars and wing ditches at approaches to streams, roads, and gullies to prevent channeling water from firebreaks into these areas.

Water bars and wing ditches MUST be installed at the following intervals:

Spacing of Wing Ditches:

Gradient (% Slope)	Interval (Feet)
2 – 5	200
5 – 10	100
>10	75

Spacing of Water Bars:

Gradient (% Slope)	Interval (Feet)
1	400
2	245
5	125
10	78
15	58
20	47
25	40
30	35
35	32

Refer to Arkansas Best Management Practice Guidelines for Silviculture for further design considerations and diagrams.

Protect the discharge area of these water management measures with stone, grass sod, brush, logging debris, or other materials that will reduce the velocity of the runoff and control scouring.

OPERATION & MAINTENANCE

Inspect firebreaks at least annually. Remove woody materials such as dead limbs or blown down trees and remove them from the firebreak. Rework bare ground as necessary to keep clear of flammable vegetation preferably prior to spring and fall fire seasons. Access by vehicles or people will be controlled to prevent damage to firebreak.

CLEAN-TILLED FIREBREAKS

Clean-tilled firebreaks must be wide enough to afford maximum protection from wildfires during average fire danger. These firebreaks shall be designed to be 15 feet wide. However, points along the firebreak can be as narrow as 10 feet wide in those areas restricted by obstacles. No part of the fire break should be less than 10 feet wide.

Firebreaks can be constructed with a variety of equipment types. The desired result is a bare area free of burnable material located in such a way that erosion is kept to a minimum. Erosion control measures MUST be installed for the firebreak to be properly constructed.

Constructed firebreaks should tie into existing natural or man-made barriers whenever possible. These barriers include lakes, streams, ponds, roads, cultivated fields, pastures, and utility right-of-ways. No gaps should be left through which wildfire might enter the area to be protected.

Dead trees next to firebreaks should be cut and removed as these trees burn slowly and could throw sparks across the firebreak.

VEGETATIVE FIREBREAKS

All firebreaks may be vegetated for added fire control, wildlife food, or livestock forage, but they must be widened to permit sufficient sunlight to reach the vegetation. A 30 foot width is required for these purposes. As a result, ALL parts of a vegetated firebreak should be at least 30 foot wide.

Plant species selection will be based on attributes in retarding fire and ease of maintenance. These species should be those that grow best in the cool season and provide green cover during the spring and fall fire seasons.

Mow, disk, or graze vegetative firebreaks annually to a height of 6 inches to avoid a build-up of excess litter and to control weeds. Treatment should be timed to reduce impacts to nesting.

Grazed firebreaks can be used in areas where livestock are present in sufficient numbers to keep the firebreak closely grazed.

Grazed firebreaks will utilize species suitable for livestock forage that are compatible with purpose (Refer to Pasture and Hayland Establishment, Code 512). Vegetation must be reduced to 6 inches or less in height prior to September 1.

Refer to practice guidance for Critical Area Treatment, Code 342, for species suitable for use to retard erosion on the firebreaks.

Select plant species that provide wildlife food and cover if compatible with purpose. Refer to Tables 1 – 4 for suggested wildlife mixes.

Vegetated firebreaks will be limed and fertilized periodically based on soil tests and will be reseeded when necessary.

See practice guidance for Fuel Break, Code 383, for additional vegetation management information to augment the firebreak.

ROADS USED AS FIREBREAKS

Existing roads may be used as firebreaks if properly maintained. They should be at least 10 feet wide if used for this purpose.

All flammable material will be removed from the roads in early spring and fall prior to the critical fire seasons.

Table 1. Recommendations for Firebreak Plantings Beneficial to Wildlife, More Erosive Sites: Ozark Mountains, Ouachita Mountains, Ark. River Valley

Plant Mixes	Seeding Rate (#/ac)	Planting Dates
Rye (Nurse Crop)	60	09/15 – 10/15
Orchard grass	10	
Red Clover or White Clover	8 2	

Table 2. Recommendations for Firebreak Plantings Beneficial to Wildlife, More Erosive Sites: Delta, Crowley's Ridge, Coastal Plain

Plant Mixes	Seeding Rate (#/ac)	Planting Dates
Oats (Nurse Crop)	60	02/15 – 03/15
Bahia grass	10	
White Clover	3	

Table 3. Recommendations for Firebreak Plantings Beneficial to Wildlife, Less Erosive Sites: Ozark Mountains, Ouachita Mountains, Ark. River Valley

Plant Mixes	Seeding Rate (#/ac)	Planting Dates
Rye (Nurse Crop)	60	09/15 – 10/15
Orchard grass	8	
Crimson Clover	15	
White Clover	1	
Rye (Nurse Crop)	60	09/01 – 10/15
Orchard grass	8	
Crimson Clover	8	
Wheat (Nurse Crop)	30	09/15 – 10/15
Orchard grass	2	
White Clover	2	
Korean Lespedeza	10	03/01 – 04/15

Table 4. Recommendations for Firebreak Plantings Beneficial to Wildlife, Less Erosive Sites: Delta, Crowley's Ridge, Coastal Plain

Plant Mixes	Seeding Rate (#/ac)	Planting Dates
Oats (Nurse Crop)	60	09/15 – 10/15
Bahia grass	7	
Korean Lespedeza	8	
White Clover	2	